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ABSTRACT

Violations of interpersonal spacing expectations have been demonstrated to influence a receiver's perception of the credibility, attraction, and influence of an initiator of such violations. Recent research on distraction and on personal space points to several potential strategies a persuader may adopt when trying to influence another individual. Research must first establish normative distances between interactants; once such norms have been established, deviations from those norms should produce predictable communication outcomes. Distraction offers a potential theoretical base from which the effects of violations of interpersonal distancing expectations can be predicted. A proposed model suggests that distance and reward serve as distractors with predictable results. Future research is needed to test the robustness of the model. Research is needed to establish that interpersonal distancing violations are distracting, to establish reliable and valid measures of distraction and counterarguing, to further test the model of interpersonal distancing expectations, and to answer the question of whether a threat threshold exists. (Author/GT)

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PROXEMIC CONCOMITANTS OF PERSUASION

REVIEW AND COMMENTARY

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Recently, persuasion researchers have been investigating a well-known hypothesis in the attitude change literature that individuals often resist attempts of influence by silently arguing a persuader's message and/or derogating the speaker of a persuasive message. The underlying rationale for this effect is that individuals counterargue a message as they receive it, attacking the arguments contained in the message. Research has, with some success, documented that individuals suppress such counterarguing when distracted. Such distraction has traditionally taken the form of environmental stimuli, movies, critical assignments, etc., which serve to disrupt the counterarguing process. Research of this nature, however, has not provided a persuader with a subtle and naturally occurring distractor--one that the persuader might manipulate in a persuasive transaction.

This paper seeks to provide a persuader with a rationale for developing strategies based on distraction which is inherent to the persuasive interaction. In doing so it limits the nature of the interaction to interpersonal, or one-on-one persuasive attempts. Along the line suggested in a recent review and commentary on persuasion research, it also includes as persuasive outcomes variables other than attitude or behavior change (e.g., Miller & Burgoon, 1978). The outcomes of interest include perceptions of source attractiveness and credibility in a persuasive, interpersonal situation.

Within any interpersonal interaction, a myriad of factors serve to influence the persuasive outcomes of interest. Among these factors, interpersonal distancing has been demonstrated to affect perceptions of attraction and credibility between interactants and to modify expected interaction outcomes. Of the variables investigated in interpersonal distancing studies, very few have focused upon the perceived credibility and attraction of a "violator" who does or does not invade another individual's personal space. The same is true of persuasion research. What research that is available suggests that violations of personal distancing expectations do effect perceptions of source credibility and attraction and have an influence on the acceptance of the source's message. It is argued in this paper that violations of expected distancing norms serve to distract the receiver of a persuasive message from counterarguing the arguments contained in the message. Further, such violations when considered with the characteristics of the persuader should interact to produce differential results in terms of attraction, credibility and message acceptance. As such, the distraction and personal space literature are discussed, studies related to persuasion and personal space are then reviewed and the results are then explained in terms of the proposed distancing-distraction model.

Distraction

Recent research suggests that distraction created by other people or environmental events may mediate an individual's susceptibility to a persuasive message (e.g., Baron, Baron & Miller, 1973). In much of this research the process of counterarguing has been used as an explanatory concept. It has been argued that the ability of a message to be influential is dependent upon the probability of its being received and understood by a receiver, its probability of being discredited and the validity of the arguments in the message to which receivers yield to (Weyer, 1974). Baron, Baron and Miller (1973) argue that distractive stimuli may facilitate persuasion by dividing a receiver's attention when exposed to counterattitudinal messages, by disrupting the screening of information and inhibiting the production of counterarguments. It is this disruption of counterargument production which leads to increased susceptibility of accepting the message.

Festinger and Maccoby (1964) first reported that persuasion was enhanced by distracting receivers of counterattitudinal messages through the simultaneous presentation of disruptive stimuli. They suggested that distraction interfered with counterarguing, disrupting a subvocal (psychological) process whereby the receiver is prevented from subvocally counterarguing against the message. Along this same line of thought, Brock (1967) found that where there was an increase in message discrepancy, there was also an increase in receiver counterargument production. Further, Brock's data suggested an inverse relationship between the production of counterarguments and yielding to the message; as counterargument production increased or decreased, yielding to the message decreased or increased.

Since counterarguing is a subvocal, psychological variable, the question arises as to whether distraction interferes with the production of counterarguments. Several studies suggest that it does (Brietrose, 1966; Dorris, 1967; Osterhouse & Brock, 1970; Zimbardo et al, 1970; Keating & Brock, 1974). Subjects who were distracted yielded more to the message's position than did nondistracted subjects, who were more resistant to the message. Additionally, distracted subjects produced less counterarguing than nondistracted subjects. Other researchers (Freedman & Sears, 1965; Kiesler & Mathog, 1963), although not measuring counterarguing, have relied upon the distraction-counterarguing production relationship to explain their findings of increased persuasion with distraction.

Several theoretical explanations have been offered which suggest that distraction may mediate susceptibility to a persuasive message. The first suggests that distraction interferes with the generating of counterarguments, rehearsal of arguments or derogating the persuader's character (Festinger & Maccoby, 1964). A second explanation is that distraction interferes with the learning of new arguments (McGuire, 1966). While in the former case distraction should facilitate attitude change, the later should inhibit attitude change. Both explanations have received support with a direct relationship found between counterarguing and persuasion by Festinger and Maccoby (1964) and Osterhouse and Brock (1970), while others have found either decreases in message acceptance or no effect for distraction (Breitrose, 1966; Gardner, 1966; Haaland & Venkatesan, 1968; Vohs & Garrett, 1968; Zimbardo, Ebbesen & Fraser, 1969). For example, Haaland and Venkatesan and Vohs and Garrett found that distraction decreased attitude change and Breitrose and Garner found no significant differences for attitude change. Additionally, Vohs and Garrett, Breitrose, Gardner and Zimbardo, Ebbesen and Fraser found that learning (or recall) decreased in distraction conditions.

Festinger and Maccoby (1964) suggested that distraction would not facilitate persuasion if the distraction interfered with the learning of the message. Even in extreme distraction conditions, for distraction to enhance persuasion, there must be learning. The mixed results of distraction research, however, have been suggested to rest on two explanations: the nature of the distraction and the focus of attention (Baron, Baron & Miller, 1973). When subjects were focused primarily on the message, Zimbardo et al (1970) found that attitude change increased, but when focused on the distractor (in this case, an irrevelant task) less attitude change was obtained. Additionally, the type of message and its complexity would seem to mediate distraction effects. In the Breitrose, Gardner and Vohs and Garrett studies, the failure to find increased attitude change may have been a function of a dull or noninvolving message. Regan and Cheng (1973) demonstrated that complexity of message also effects the distraction outcome. They found that where the message was simple but unconvincing, distracted subjects changed their attitudes more than nondistracted subjects. When the message was complex, but if understood convincing, the message's impact was inhibited.

Although a myriad of factors appear to influence distraction and counterarguing, it would appear that both the nature of the distractor and the message, in terms of interest and complexity, mediate any hypothesized relationships between attitude change and distraction and counterarguing.

To this point the discussion has generally centered around the distraction. However, one additional area needs mention: the process of counterarguing. Since counterarguing is a subvocal, psychological process, any direct observation of the process is almost impossible. It has been suggested, however, that some individuals are more motivated to counterargue a message than are others (Brandt, Kinkelacker & Stoyanoff, 1977). Just as some individuals tend to focus on the communication source when processing a persuasive message, others are motivated to focus on the content of the message, testing, attacking and refuting arguments contained in that message. Brandt et al (1977) found support for the hypothesis that individuals with a high propensity to counterargue (as pretested by a check list of arguments) would be more prone to counterargument production and more resistant to a communicator's influence than individuals with a low propensity to counterargue. Further, they suggested that perceptions of source credibility were also affected by an individual's propensity to counterargue. Festinger and Maccoby (1964) suggested that, other than discrediting the points a communicator makes in a persuasive presentation, counterarguing also takes the form of source derrogation. Brandt et al also found that subjects with a high propensity to counterargue perceived the message source as significantly less credible than did subjects with a low propensity to counterargue. This result is similar to other findings that decreased counterarguing is associated with competent sources (e.g., Cook, 1969; Baron, Baron & Miller, 1973).

The question, however, is whether source derogation and content-related counterarguments are alternative modes of resisting influence, constitute the same mode of resisting influence or are alternative--yet complementary--modes of resisting influence. Festinger and Maccoby (1964) note that subjects in distraction conditions where counterarguing is inhibited may be influenced unless they are able to reject and derogate the communicator. Although Festinger and Maccoby's position would indicate that alternative modes of resisting influence operate, if a subject derogates the source related to the content of the message (e.g., "a source using these arguments is unqualified to speak on this topic"), then that source derogation might be considered a complementary alternative to content-oriented counterarguing. Indeed, research would seem to support this rationale. Miller and Baron (1968) found that distracted subjects changed their attitude significantly more than nondistracted subjects when the source was highly credible (using accent and vocabulary to increase credibility) while distraction had no effect on attitude change when the source was not credible. In a second study they induced credibility differences via written descriptions of the source prior to message presentation and found that distracted subjects were less persuaded in both credibility conditions. They explained the difference in findings by noting that subjects appeared not to have perceived the sources as credible, that two conditions of low credibility were established and that the evaluation instructions enhanced the <u>negative</u> aspects of the source's credibility. In other words, the evaluation instructions enhanced persuasion for the highly credible source and reduced persuasion for the noncredible source. In this same line, Kiesler and Mathog (1968) suggest that when exposed to a "barely" credible source, the individual does not need to counterargue, that he/she can rely on source derogation alone to resist the persuasive attempt.

It would appear that the nature of the distraction, the message, the source's perceived credibility and possibly the individual's propensity to counterargue all mediate the relationship between distraction and attitude change. Further, it is logical that strategies which might be employed to enhance a source's credibility (and possibly his/her attraction) should enhance the facilitative effect of distracting an individual from counterarguing a persuasive message. Although a variety of distractors have been employed, one untested potential distraction, which has been documented to effect a source's credibility and attraction (Burgoon, 1978; Burgoon, Stacks & Woodall, 1977, 1979), is the violation of interpersonal distance expectations (Burgoon & Jones, 1976; Burgoon, 1978). Further discussion will center on the potential this variable has for facilitating or inhibiting counterarguing as a distractor.

Personal Space

The growing amount of interest in spatial behavior over the last few years is indicative of the interest of how man structures his day-to-day interactions. The interest in what Hall (1963) observed to be man's unconscious structuring of microspace, or "proxemics," has led researchers to gain a greater understanding of how we can consciously manipulate the space immediately around us. Although the use of space may still be outside most individual's conscious control, research has and will lead to greater deliberation about its effects on communication interactions.

The distance between two interactants has been termed "personal space," which may be viewed as the distance which limits and separates individuals during interaction. Personal space has been equated to a body-buffer zone (Horowitz, Duff & Stratton, 1964, p. 651), "the space immediately surrounding an individual which he feels to be personal, to belong to himself" (Dosey & Meisels, 1969, p. 93) or a bubble or sphere that acts to protect an individual from intrusion by others. Hall, using a similar term, personal distance, refers to a distance of between 18 inches and four feet which serves to comfortably separate coacting individuals (Hall, 1969, p. 119). As such, it is but one of four distance zones defined in terms of comfort or intimacy, the other three being intimate distance (less than 18 inches), social distance (four to 12 feet) and public distance (greater than 12 feet). Although recent research has called into question the accuracy of Hall's spatial zones (Burgoon & Jones, 1976; Mazur, 1977; Shuter, 1977), the relative distances still appear sound (Heston & Garner, 1972; Connolly, 1975).

In reviews of personal space literature (e.g., Evans & Howard, 1973; Pederson & Shears, 1973) one finds personal space treated both as a dependent variable and as an independent variable. As a dependent variable, personal space has been viewed as a function of three sets of variables (Watson, 1972; Burgoon & Jones, 1976). Interactant variables are those variables which the individual brings to the interaction (i.e., cultural, demographic and personality variables). Interaction variables are those which concern the context within which the interaction takes place (i.e., purpose of the interaction, formality, etc.). Environmental variables are those which concern the context within which the interaction takes place (i.e., type of territory, location, familiarity). As an independent variable the effects of violating distancing norms have been examined, both for the effects on the individual violating the norm and the individual whose normative distance has been violated. The effects studied so far have focused largely on generally compensatory and physiological reactions by the recipient of the violation and his/her changes in perceptions of attraction, credibility and persuasiveness of the violator.

The establishment of interpersonal distancing norms and the effects of violating such norms are dependent upon the three sets of variables (interactant, interactional and environmental). Their importance lies in the fact that distancing norms adopted by any two individuals are a function of all three sets of variables and, as such, must be taken into consideration when dealing with personal space expectations and violations of those expectations.

Effects of Violating Interpersonal Distancing Expectations

Theoretical Models

Two recently developed models predict distancing effects to be a curvilinear function of the amount of expected distance between two individuals and the characteristics of one or both of the interactants. One, developed by Sundstrom and Altman (1976), is restricted to the effect of degree of acquaintanceship between individuals (i.e., friends, strangers, and strangers who do not expect to interact) on comfort levels in an interaction. The other, originated by Burgoon and Jones (1976) and extended by Burgoon (1978), considers a wide range of interactant variables, which are used to classify "initiators" as rewarding or punishing (the initiator being the interactant whose deviations are examined for their effect on a reactant). As such, degree of acquaintanceship is but one variable which can reflect on the reward-punishment power of the initiator. Other potential factors include physical attractiveness, sex or racial composition of a dyad, status, power, and positive and negative feedback. The Burgoon model also considers a wide range of dependent variables, including attraction, credibility, power, liking, comprehension and persuasion. Partial support for the model has been offered by Burgoon (1978) and Burgoon, Stacks and Woodall (1977, 1979), with physical attractiveness and positive and negative feedback affecting reactants' perceptions of an initiator's attraction and credibility.

The Burgoon and Jones model also predicts that the relationship between reward, distance and outcome is curvilinear in nature. The shape of the curve is based on the amount and direction of the deviation from the expected distancing norm and the reward-punishment power of the initiator of the deviation (Burgoon, 1978). For the rewarding initiator, deviations closer than expected should have increasingly positive outcomes up to the point of a "threat threshold;" distances closer than the threat threshold are expected to have increasingly negative consequences, as are deviations farther than expected; for the punishing source, by contrast, the apex of the curve should occur at the normative distance with deviations bringing increasingly negative outcomes. Based on their recent findings Burgoon, Stacks and Woodall (1977, 1979) have suggested that the relationship for the rewarding initiator may have to be revised such that any deviation produces better outcomes than conforming to the expected distance.

Research Paradigms

At least three different research paradigms are identifiable in the research investigating the effects of normative distancing violations. The majority of research in personal spacing has centered on two paradigms: (1) the use of preestablished distances, or structured interaction distances, and (2) invasions of personal space. The structured interaction distance does not allow for normative distancing to occur naturally, but instead imposes an artificial norm for that interaction. Most of the research in this paradigm has relied upon Hall's persona and/or social distance zones (18 inches to 12 feet) for the distance manipulation.

It is questionable whether these distances truly represent interactional distances as they fail to consider the nature of the interactants, the interaction and the environment in which it occurs, which all contribute to actual normative distances. Research utilizing structured interaction distances, however, has been supportive of an effect whereby more "immediate" distances (closer distances between individuals) tend to increase perceptions of an individual's perceived credibility and attractiveness (depending upon the nature of the initiator) and, in some cases, his/her perceived persuasiveness (e.g., Mehrabian & Williams, 1969; Albert & Dabbs, 1970; Garner, 1972; Rosegrant & McCroskey, 1975; Imada & Hakel, 1977; Riess, 1977). Research has also demonstrated an effect for violations farther than the norm; Lassen (1973) found that anxiety was increased at great distances (nine feet or more) as well as close distances. Patterson and Sechrest (1967), however, found that compensatory reaction decreased at far distances (10 feet), but that ratings of aggressiveness, dominance, extraversion and friendliness decreased as distance increased (Patterson & Sechrest, 1970).

Research employing the invasion paradigm has relied on the effect of extremely close distance violations on the individual and has been demonstrated to produce compensatory reaction (e.g., reactions of anxiety, nervousness and flight) and strong physiological reactance from the individual whose space has been violated (e.g., Garfinkel, 1964; McBride, King & James, 1965; Felipe & Sommer, 1966; Middlemist, Knowles & Mather, 1976).

The third research paradigm uses actual interaction distances adopted by the reactants. Research representative of this approach is designed to allow interactant, interactional and environmental variables to function and thus establish a more "natural" interaction distance. Burgoon, Stacks and Woodall's (1977) research falls into this paradigm, where subjects were allowed to establish their own normative distances from a confederate who then either maintained the norm or deviated closer or farther than the norm. At least two other studies fall between the structured interaction and subject-determined approaches. Burgoon (1978) identified the prevailing normative distances for her subject population by pilot test and then had confederates systematically deviate from the pre-established norms. In this way, she operated her distance manipulation with more precision than studies based on cross-cultural norms. Albert and Dabbs (1970) also attempted to at least identify distances judged as "uncomfortably close," "average," and "uncomfortably far." Unfortunately, their average and far distances (five to six feet and fifteen feet, respectively) fall outside the personal space zone and include both the social and public zones as defined by Hall (1969).

Effects of Violating Normative Distancing Expectations

Compensatory and physiological reactions. As noted earlier, most compensatory and physiological reactions to spatial invasion are the result of extremely close distances between two individuals. These behaviors have been attributed to be the result of anxiety reactions or discomfort arising from the invasion (Argyle & Dean, 1965). The behaviors manifested by violations of personal space include changes in eye contact, body lean, increasing distances between violator and subject and actual flight. Probably the most often cited study of personal space invasion is that of Felipe and Sommer (1966), who found such behaviors to occur when an experimenter violated subjects' personal space. More recently, Krail and Leventhal (1976) found an effect for sex on compensatory reactions. Using Felipe and Sommer's method, they found shorter latency periods in compensatory behavior the closer the invader was to the subject. For same-sex interactions, males had shorter latency periods than did females and a significant sex

of subject by sex of invader interaction was found where a female invader/male subject interaction elicited longer latency periods than did a male invader/female subject interaction. Other researchers have found that extremely close spatial invasions produce anxiety on several indices (Horowitz, Duff & Stratton, 1964; McBride King & James, 1965; Sommer, 1969; Baxter & Deanovich, 1970; Patterson & Sechrest, 1970; Patterson, Mullens & Romano, 1971; Middlemist, Knowles & Mather, 1976); embarrassment (Garfinkel, 1964); changes in eye contact (Argyle & Dean, 1965; Mehrabian, 1968; Goldberg, Keisler & Collins, 1974); and changes in body orientation and self-manipulations (Argyle & Dean, 1965; Felipe & Sommer, 1966; Patterson, Mullens & Romano, 1971). These effects offer strong support for the existence of a threat threshold as posited by Burgoon and Jones (1976) and suggest that extremely close distances between individuals produce responses which the individual might label as negative.

Attraction and credibility. The effect of different distances between two individuals has been demonstrated to produce differing perceptions of attraction and credibility. Rosegrant and McCroskey (1975) found that an "invasion" of six inches produced better ratings of credibility on the dimensions of sociability, competence and composure. Their interviewers were graduate students and, if one assumes their status was higher, the results are not inconsistent with the prediction that rewarding (i.e., high status individuals) interviewers will be perceived as higher in credibility at a close distance. Similarily, Garner (1972) found that an invasion to within six inches of the subject increased ratings of a female interviewer on the credibility dimensions of competence, composure and dynamism. Given that the interviewer was moderately attractive in dress and appearance, it may be inferred that subjects viewed the interaction as rewarding. Moreover, males may have viewed the invasion as having sexual overtones, thus increasing the reward value of the interaction. The same type of results have been found by Patterson and Sechrest (1970) in an interview-interviewee situation and Imada and Hakel (1977) in mock employment interviews. Burgoon (1978), also utilizing an interviewer-interviewee situation, found that rewarding and punishing interviewers (giving positive and negative feedback, respectively) were perceived differently when they sat at differing distances from the reactant. Rewarding interviewers were perceived as more attractive and credible at closer distances. (The apex of the curve was typically at a distance about 18 inches closer than the pre-established normative distance.) The punishing interviewers, however, obtained the highest ratings at the pre-established normative distance. These studies, however, utilized structured interaction distances and, thus, did not allow natural spacing norms to occur. Burgoon, Stacks and Woodall (1977), however, did allow subjects to establish their own normative distances (a range of one to forty-nine inches) in an interview setting. They found that rewarding interviewers obtained higher ratings of attraction and credibility by deviating from the established normative distance while the punishing interviewer obtained highest ratings by maintaining the observed norm. Rewarding interviewers obtained higher ratings in either the close or far distance conditions (deviations of 18 inches closer or farther than the normative distance, respectively) on some outcome variables. Whether the threat threshold (operationalized as a distance of less than six inches between interviewer and interviewee in the Burgoon, Stacks and Woodall study and either eight or ten inches in the Burgoon [1978] study) was reached is questionable. Although there is strong implicit support for such an effect in the literature, it may be that in these experiments the distance was not sufficiently close to generate a feeling of threat or that the laboratory atmosphere and explanation of the task reduced subjects' reactions to extreme physical closeness.

Persuasion. A review of the literature on nonverbal communication and persuasion reveals that very little research has been undertaken in the area of inter-

personal distancing and none with violations of distancing expectations. For the most part, the research dealing with spatial effects has found it best to explain hypothesized results on a post hoc basis. Mehrabian and Williams (1969), for example, used the concept of immediancy and expected that more immediate (i.e., closer) distance cues should be directly related to the intended persuasiveness of encoders and perceived persuasiveness of decoders. Albert and Dabbs (1970) explained their findings in terms of reactance theory, while Garner (1972) suggested that derogation of topic or source took place when subjects' space was encroached. Riess (1977), integrating research on communicator attractiveness, expertise, status and distance, hypothesized that distance between a speaker and target would affect perceived persuasiveness when the target was focused on source attractiveness and status. He concluded that distancing cues had no effect on status and attraction but when focus was on status a trend was obtained for persuasion. Since all four studies used structured interaction distances, natural distancing norms were not operational: however, the results suggest that distancing between individuals does affect persuasiveness.

Mehrabian and Williams (1969) found that subjects, when asked to encode message of varying degrees of persuasiveness (highly persuasive, moderately persuasive or purely informational), adopted the same approximate distances, i.e., there were no significant differences in the distances adopted by subjects when presenting their messages. In a second study, they employed a decoding methodology, where subjects viewed a video-taped, but silent, communication at two distances (immediate, four feet, and nonimmediate, 12 feet). A significant main effect was found where the immediate distance between persuader and persuader was perceived as more persuasive than the nonimmediate distance. Further, significant sex, eye contact and distance interactions were found such that at the far distance males were less persuasive with 90 percent eye contact than 50 percent eye contact; females were less persuasive with 50 percent eye contact than 90 percent eye contact; and at the close distance, eye contact was nonsignificant for either sex. The effect of eye contact, however, may be questioned since the persuaders wore masks with slits for eyes which would make the eyes the most salient physical feature available to the subject. Another factor troubling the Mehrabian and Williams study was the operationalization of distance. Although the immediate distance seems to fall within Hall's personal space zone, the nonimmediate distance lies at the outer boundary of social space and far exceeds Sommer's (1962) arc of comfortable conversation. It is plausable that the far distance was perceived by the subjects viewing the interaction as impersonal to the persuadees (c.f., Jones & Davis, 1965), who thus cued in on the mask for curiosity's sake. This might explain the higher order interactions. The sex difference at the far distance may be attributed to normative eye contact patterns which indicate that females maintain more eye contact while speaking than do males (Exline, 1963).

Albert and Dabbs (1970) found that as distance between a hostile persuader and persuadee decreased so did attitude change. They pretested distances of comfort (uncomfortably close, one to two feet; average, five to six feet; uncomfortably far, fourteen to fifteen feet) between subject and confederate and, while increased distance tended to increase persuasion, attention at both the close and far distances was found to be focused on the speaker's physical appearance. Two interpretations are possible from this study. First, if status is an important characteristic in a persuasive interaction, then the increased distances adopted by the speaker may have indicated increased status (e.g., Willis, 1966) and subjects who perceived the speaker to be of higher status changed their attitudes in the speaker's direction. Secondly, since the attitude change for the hostile speaker was nonsignificant between the "average" and far distances, one might reinterpret these distances on two grounds. The "average" distance may have approximated the

normative expected distance for a punishing (in this case, hostile) source, and the far distance (beyond the outer boundary for Hall's social zone) may have approximated a "public speaking" situation where the subject comprised the "audience." Since the distance is far beyond the agreed distance zone for personal space, the norms operating may produce different results which leaves the effect largely uninterpretable at that extreme a distance.

A second study, which found decreased attitude change at extremely close distances, might be interpreted as reaching the subjects' threat threshold. Garner (1972) operationalized his invasion as a distance of less than six inches from the subject, hence heightened arousal caused by an attractive interviewer could have caused subjects to ignore the topic and focus on their physiological reactions to inadequate space. A third study (Riess, 1977) manipulated the seated distance and subjects' focus on the persuader (i.e., via instructions to focus attention on either status, expertise or attractiveness). Distance was operationalized as falling with Hall's social-consultative zone (3.5 to 7 feet) and, although no significant results were found for distance, a trend was obtained whereby perceived persuasiveness increased as distance increased, but only in the status-focus condition. His results are comparable to Albert and Dabbs' when interpreted from the perspective that higher status individuals are accorded more distance. Again, however, the use of structured interaction distances may be responsible for the lack of significance on distance.

Several potential explanations may be advanced to account for these results, which are not completely inconsistent with each other. That spatial invasions (i.e., distances of six inches or less) produce less persuasion should be expected from the nature of the invasion alone; invasions of this sort have been documented to produce anxiety, embarrassment and reactions reflecting general discomfort on the part of the individual whose space has been invaded (e.g., Garfinkel, 1964; Horowitz, Duff & Stratton, 1964; Argyle & Dean, 1965; Patterson, Mullens & Romano, 1971). Mehrabian and Williams' findings that more immediate distances produce more persuasion could be explained by noting that the immediate distance, which was not close enough to constitute an invasion, may have approximated that distance which an average individual adopts in delivering a persuasive message, but was close enough to indicate some degree of attraction between the two individuals. As such, closer distances would indicate both involvement in the task and attraction within the interaction. Albert and Dabbs' finding that increased distance produced increased acceptance of the persuasive message and attention to physical appearance may best be explained as the operation of different norms outside the personal space zone. Additionally, the only significant difference was found between the close and "average" distances. The decreased message acceptance at the close distance suggests that it may have been too close and possibly threatening to the subject. Since the close distance was measured as one to two feet, face-to-face, with the interactants seated facing each other, the actual knee-to-knee distance would necessarily be less than one inch, a distance which should be threatening to the subject. What the results would have been if normative distances had been allowed to be established and then violated has not been answered.

Interaction Distance and Distraction

As noted earlier, distractive stimuli have traditionally taken the form of environmentally produced distractors. Distractors employed have ranged from irrevelant movies and slides, monitoring tasks, and heckling, to eating while reading evaluation instructions. Very little research has dealt with distracting stimuli which are inherent to a social interaction. In cases where outside stimuli have been employed to create a social interaction, audio- or video-taped presenta-

tions have been employed (e.g., Miller & Baron, 1968; Brandt et al, 1977; Burgoon et al, 1978) and have dealt with interactions not specifically of an interpersonal (dyadic) nature. Of interest to communication researchers might be stimuli which are available to a persuader in a social interaction which would increase his/her persuasiveness, credibility and attraction. Violations of interpersonal distancing expectations provide a subtle, yet potentially distracting stimulus which could be manipulated by a persuader.

The relationship between distraction and the violations of distancing expectations has not been specifically addressed in the literature, nor has a rationale for its potential as a distractive stimuli been advanced. It seems reasonable that a rationale can be derived based on the disruption of an individual's motivation to counterargue a persuasive message due to (1) the distance the persuader maintains or does not maintain from the subject and (2) the characteristics of the persuader. Additionally, a third variable, propensity to counterargue may contribute to the distancing-distraction process.

Based on the assumption that individuals, when presented a counter-attitudinal message, screen and counterargue information and arguments advanced by a persuader, it is expected that the distance the persuader adopts in the interaction will either facilitate or inhibit the receiver's motivation to counterargue. It is suggested that this effect takes place due to either anxiety from extreme spatial invasion or from attributions concerning reward and the degree of perceived personal involvement at other distances.

Since almost all theories of interpersonal attraction predict that a source's attractiveness enhances the efficacy of his or her persuasive message (Tedeschi, Schlenker & Bonoma, 1973), attractive (rewarding) sources should gain greater compliance to their messages than unattractive sources. Because attraction can take so many forms (i.e., physical attractiveness, attitudinal similarity, status, reinforcement cues, etc.) one might argue that the variable, by breadth of definition alone, is so broad as to be meaningless (Marlowe & Gergen, 1969). However, Huston (1974) notes that almost all forms of attraction serve as reinforcers which may have positive or negative reward value. Tedeschi (1974) notes that attraction, in a variety of forms, arouses an expectancy for cooperation in interactions, induces cooperation, renders a subject more susceptible to persuasive communications, induces conformity, etc. While the operationalizations of attractiveness may be many and varied, the results are generally the same. Support for source attractiveness, in terms of physical attraction, is offered by Mills and Aronson (1965) who found that a female who was made to appear physically attractive was more effective in influencing a male audience (when she made clear her intent to influence) than was the same female made physically unattractive.

While reward-punishment power may be a characteristic of the source, the personal involvement, as perceived by the receiver, should be affected by the distances adopted and deviated from in the interaction. Proxemic research suggests that individuals who are attracted to each other establish closer normative distances, which should indicate a degree of personal involvement within that interaction. If one individual deviates from the norm, the degree of personal involvement should be proportional to the reward value of that individual and the direction of the deviation. If the initiator is punishing, the degree of personal involvement should decrease proportionally with the deviation. In contrast to the rewarding initiator, the punishing initiator's deviations should be considered threatening since punishing initiators are not allowed to deviate from established

norms and such a deviation, if it were to occur, would reinforce the negative reward value associated with the interaction.

The Burgoon and Jones (1976) model proposes that violations of personal spacing expectations should lead to positive or negative effects depending upon the characteristics of the initiator of the deviation from the distance expectation and the direction and amount of that deviation. As such, four distances can be conveniently, if arbitrarily identified: a close distance which is a deviation closer than the norm, a far distance which is a deviation farther than the norm, a threat threshold which is an extreme spatial invasion, and the normative distance established at the onset of the interaction. Burgoon, Stacks and Woodall (1977) suggest that the four distances may be operationalized as points on a continuous line set not by pre-established distances but by the actual normative distances selected by the subject and confederate.

The Burgoon and Jones model proposes that extreme spatial invasion constitutes a violation of an individual's threat threshold. Although research has not yet supported the existence of the threat threshold (Burgoon, 1978; Burgoon, Stacks & Woodall, 1977, 1979), lack of support may be an artifact of the experimental procedures employed. It may be that the laboratory itself serves to forewarn subjects that <u>any</u> behavior may be appropriate on the part of the individuals interacting. However, effects of extreme spatial invasion have been documented to produce both behavioral and physiological reactions which have been labeled as anxiety or embarrassment. This focus might lead to two complementary outcomes. First, the individual could identify the anxiety or embarrassment with the initiator of the invasion. The equating of anxiety with the initiator should cause the individual to derogate the source, regardless of reward value, in terms of source credibility and attraction which, in turn should lead to less acceptance of the initiator's message. Secondly, the extremeness of the invasion might cause the individual to ignore the message completely: the individual may be so distracted as to miss the message and its arguments.

From a distraction-counterarguing perspective, these effects are dependent upon the nature of the distractor and the focus of attention of the receiver. When the initiator of a deviation enters or passes the receiver's threat threshold, it was suggested that two explanations might account for the decreased communication outcomes. For the first, that the receiver would equate the anxiety or embarrassment with the source, one would expect that the receiver would be focused primarily on the source and not the message. In this respect learning might be disrupted, as was found by Zimbardo et al (1970). However, given source characteristics (i.e., reward and punishment), a rewarding source should still be slightly more persuasive than a punishing source. The second explanation for decreased persuasiveness was that the receiver might ignore the message due to the disruptive effects of extreme invasion. As Festinger and Maccoby (1964) noted, for persuasion to be facilitated the distraction must not interfere with the learning of the messag In the case of either explanation, extreme spatial invasion should decrease attitude change.

Such effects could explain Garner's (1972) finding that extreme invasion produced less favorable attitudes toward the topic and Albert and Dabbs' (1970) finding of less attitude change with decreased distance. That subjects engage in source derogation and counterargument production would seem to make intuitive sense at the extremely close distances. If increased counterarguing is associated with increased source derogation, then spatial invasion should facilitate both, as an apparent cause for discomfort is readily available to the subject. Garner, however, reported that perceptions of competence, composure and dynamism were higher

with invasion than noninvasion subjects. As noted earlier, the attractiveness of the confederate may have facilitated ratings of credibility. From the previous argument, however, it may be that Garner's subjects, focused on an attractive source presenting a noninvolving message (federal control of education), were keying on source characteristics (which may be interpreted as being positive due to attractiveness), thus rating the source higher on the credibility dimensions. Thus the invasion may have produced more attention to be focused on the rewarding qualities of an attractive source and an indication of the source's attraction toward them.

An additional finding by Albert and Dabbs (1970) might clarify what happens at "close" distances. They found that attention was focused on the source's physical appearance at the close condition and not on the message. Although their "close" condition does not approximate an extreme invasion distance, as defined by them, the distance does produce a knee-to-knee distance of less than one inch, which might be defined as an invasion of personal space. Specifically, the friendly persuader produced more attitude change across distances than did the hostile persuader. If friendly and hostile characteristics can be equated with rewarding and punishing characteristics, these results suggest that rewarding individuals produce better outcomes than do punishing individuals, which is consistent with the Burgoon and Jones model. In terms of credibility and attractiveness of the initiator of an invasion, Burgoon (1978) and Burgoon, Stacks and Woodall's (1977) findings suggest that deviations beyond the threat threshold produce lower ratings for some source credibility and attraction dimensions than at the close or normative distances.

Since the nature of the distractor appears to mediate results obtained in the distraction paradigm, the role of distance as a distraction needs further explication. With extreme spatial invasions, distance serves to distract the receiver from the message to the source. As noted, this should result in two complementary outcomes which should lead to less message acceptance mediated by the reward-punishment power of the source. At other distances, however, the distraction should cause receivers to attend to the message. This, again, is mediated by reward-punishment power. One crucial difference in the distance distractor and other forms of distraction is found in the lack of evaluation instructions. As Miller and Baron (1973) found, when subjects were given evaluation instructions, perceptions of credibility and attitude change decreased. They further suggested that evaluation instructions enhance persuasion only for highly credible sources and reduce it for sources who lack credibility. Because the distancing distraction is a naturally occurring event ameanable to manipulation, evaluation instructions would seem unnecessary (unless used for a specific reason). Distance, however, should affect perceptions of the source's credibility and attraction. With distance deviations being less salient than the message, subjects should attune primarily to the message. This should hold true only for the rewarding source deviating from the normative distance pre-established by the source and receiver. For the punishing source, the distraction would be the focus of attention.

In accord with Burgoon (1978) and Burgoon, Stacks and Woodall's (1977, 1979) suggestion that the initial model of violations of interpersonal distancing expectations be modified in the case of rewarding initiators, any deviation, up to the point of the threat threshold, should produce better communication outcomes for that source. A deviation closer than the norm should indicate attraction and increased liking toward the subject. Since people are more susceptible to persuasive messages from sources they perceive as liking them (Mills, 1966; Rosnow & Robinson, 1967), their motivation to counterargue should be disrupted and greater

yielding to the message should occur. Since violations of interpersonal distancing expectations for rewarding sources have been documented to produce higher credibility and attraction ratings on at least some dimensions (Burgoon, 1978; Burgoon, Stacks & Woodall, 1977), and subjects distracted while listening to high credibility sources are more susceptible to the message, it follows that distance deviations which enhance credibility and attraction should also produce more persuasion and less counterarguing. Additionally, a deviation closer by the rewarding source should allow the reactant to engage in quasi-courtship behaviors, which should also decrease motivation to counterargue and increase perceived attraction between the interactants. With the quasi-courtship behaviors and attraction there should also be an increase in the perceived personal involvement in the interaction. This increased involvement reflects upon the reactant's feeling that the influence is mutual, directly motivating the behavior of the initiator.

For the punishing source, however, the effect of distancing violations should be to decrease message acceptance. This effect is due primarily to threat implications and negative reward value in the interaction. In this same vein, the negative characteristics of the source may be perceived as characteristics of a poor communicator. As such the distraction may inhibit counterarguing, but the receiver need only to rely on source derogation to resist the message.

A deviation farther than the normative distance established between the persuader and persuadee should decrease outcomes for the punishing source and increase outcomes for the rewarding source. Aside from indicating less attraction, research suggests that a farther distance is indicative of antipathy (Sommer, 1969) incompatibility (Altman, 1971), aggression (Patterson & Sechrest, 1967) and anxiety (Altman, 1971). As such, reactants should be motivated to produce counterarguments and engage in source derogation. Since deviations farther than the norm would also indicate negative characteristics for the interaction with a punishing source, and possible anxiety, antipathy and incompatibility, receivers should perceive the source to be a poor communicator. These perceptions should lead to derogation of the source and the need to counterargue would be replaced by source derogation. Since the rewarding source has already provided a positive reward value for the interaction, the deviation farther than the norm should connotate increased status and attraction. The attribution of higher status and attraction should inhibit the receiver from counterarguing the message.

An unanswered question, however, is whether the receiver's attention will be focused on the distraction or the message. Albert and Dabbs' (1970) found that attention at their far distance to be centered on the physical appearance of the source and not the message. As noted earlier, their far distance may have been too far to be interpretable. If, however, the norm in this culture is to allow rewarding individuals greater deviation from normative behavior (perhaps allowing the exchange of ideosyncratic credits for their reward value), then the farther distance deviation may seem "normal" and an affirmation of attraction, credibility and status.

At the normative distance, the rewarding source should produce lower outcomes than at the far or close distances. This effect is reflected in that by maintaining the normative distance the source has done nothing to distract the receiver from counterarguing the message or possibly engage in derogation. For the punishing source, the normative distance should produce the best outcomes as deviations from the norm should facilitate receivers' motivation to engage in source derogation or counterarguing.

An additional variable, propensity to counterargue, suggests that individuals differ in their ability or proneness to engage in counterarguing. Research suggests that individuals with high propensities to counterargue are not affected by distractive stimuli (Brandt et al, 1977). High propensity individuals would seem to overcome the distraction and continue to focus on the content of the message while still derogating the source. This suggests that, whatever the distraction, high propensity individuals should be more resistant to a counterattitudinal message, at least for environmental or outside stimuli. The question which has not been addressed is whether the kind and/or variation of similar kinds of distraction produce the same result. If, as Festinger and Maccoby (1964) and Brandt et al suggest, counterarguing also takes the form of source derogation, it should inhibit the receiver's motivation to engage in counterarguing. In other words, a distraction which increases attraction and credibility should result in less counterarguing. This should hold true for both high and low propensity-to-counterargue individuals. The amount of counterarguing, however, should still be higher for the individual with a high propensity to counterargue. As with reward, one would expect a main effect for propensity in terms of the distance-distraction model.

In terms of an overall model, two curvilinear relationships should be obtained between distance, reward and propensity. For the rewarding initiator of a deviation, any deviation from the norm should produce higher ratings of credibility and attraction and more yielding to the persuasive message, except at or beyond the threat threshold. For the punishing initiator, any deviation from the norm should produce lower credibility and attraction ratings and less yielding to the message. The effect of propensity should be to produce two parallel curves for the rewarding and punishing initiator with low propensity subjects being more susceptible to the message and perceiving the initiator as more credible and attractive than high propensity subjects.

In explaining the results of earlier research in the area of distance and persuasion one finds that almost all the studies may have had subjects' focus of attention placed on the distractor either inadvertently or via evaluation instructions. Riess (1977) manipulated the focus of his subjects' attention on the status or attractiveness of his confederate via written instructions. Mehrabian and Williams (1969), via the masks their confederates wore may have inadvertently had subjects focus on the message source. This may also have been compounded by the fact that they had subjects' imagine that a message was being presented, rather than an actual message being presented. In Albert and Dabbs' (1970) study, attention was found to be focused on the source at the close distance, which would indicate that subjects were not set to the message but to the distraction. As mentioned earlier, Garner's (1972) subjects were also primarily attuned to the distraction. Since Riess found no attitude change in his study and Albert and Dabbs and Garner found decreased attitude change, keying on the source of the distraction rather than the message may account for their results. Mehrabian and Williams' finding that a more immediate distance was more persuasive than a non-immediate distance may be uninterpretable given that they did not present their subjects with an actual message and the use of masks increased the salience of the distraction. These results, when reinterpreted from the distraction-counterarguing paradigm, are not inconsistant. Instead they suggest that focusing on the source of the distraction rather than the message may have yielded subjects more resistant to the persuasive message. Future tests of the distance-persuasion relationship should take this effect into consideration.

Summary

Violations of interpersonal spacing expectations have been demonstrated to influence a receiver's perception of the credibility, attraction and influence of an initiator of such deviations. The research reviewed points to several potential strategies a persuader may adopt when trying to influence another individual in a communicative interaction. This paper has suggested that research must first establish normative distances between interactants, as influenced by interactant, interactional and environmental variables. Once such norms have been established, deviations from those norms should produce predictable communication outcomes.

It has been argued that distraction offers a potential theoretical base from which the effects of violations of interpersonal distancing expectations can be predicted. The proposed model suggests that distance and reward serve as distractors with predictable results. Future research is needed to test the robustness of the model. Several potential problem areas still need to be examined, however. First, research needs to establish that interpersonal distancing violations are distracting. Second, we need reliable and valid measures of distraction and counterarguing. Third, the model of interpersonal distancing expectations needs further testing, both in terms of the reward definition and possible modifications to the model. Finally, the question of whether a threat threshold exists must be answered. Future research must take these questions and problem areas into account before support for the model can be claimed.

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